

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number  
**WO 2004/044251 A1**

- (51) International Patent Classification<sup>7</sup>: **C21D 8/12**
- (21) International Application Number: **PCT/KR2003/002412**
- (22) International Filing Date:  
11 November 2003 (11.11.2003)
- (25) Filing Language: **Korean**
- (26) Publication Language: **English**
- (30) Priority Data:  
10-2002-0069646 11 November 2002 (11.11.2002) **KR**  
10-2002-0069647 11 November 2002 (11.11.2002) **KR**  
10-2002-0074325 27 November 2002 (27.11.2002) **KR**  
10-2002-0074326 27 November 2002 (27.11.2002) **KR**  
10-2002-0074328 27 November 2002 (27.11.2002) **KR**  
10-2002-0074329 27 November 2002 (27.11.2002) **KR**
- (71) Applicant (for all designated States except US): **POSCO** [KR/KR]; 1 Koedong-dong, Nam-ku, 790-300 Pohang, Kyungsangbook-do (KR).
- (72) Inventors; and  
(75) Inventors/Applicants (for US only): **CHOI, Kyu-Seung** [KR/KR]; c/o POSCO, 1 Koedong-dong, Nam-ku, 790-300 Pohang, Kyungsangbook-do (KR). **WOO, Jong-Soo** [KR/KR]; c/o POSCO, 1 Koedong-dong, Nam-ku, 790-300 Pohang, Kyungsangbook-do (KR).
- (74) Agent: **C & S PATENT AND LAW OFFICE**; C-2306 Daelim Acrotel, 467-6 Dogok-dong, Kangnam-gu, Seoul 135-971 (KR).
- (81) Designated States (national): **CN, JP, US.**
- (84) Designated States (regional): **European patent (DE, FR, GB, IT).**
- Published:**  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **COATING COMPOSITION, AND METHOD FOR MANUFACTURING HIGH SILICON ELECTRICAL STEEL SHEET USING THEREOF**

(57) Abstract: There are provided a coating composition for siliconizing, and a method for manufacturing a high silicon electrical steel sheet using the same. The coating composition includes: a Fe-Si-based composite compound sintered powder having a grain size of - 325 mesh and containing 20 - 70 % silicon by weight; and a colloidal silica solution containing 15 - 30 part by weight of silica solid matter with respect to 100 part by weight of the sintered powder.

WO 2004/044251 A1